



D A T A S H E E T

The Emerson DX3 is an electronically operated expansion device that provides precise control of refrigerant flow and system superheat. The DX3 employs a high resolution linear stepper motor actuator with a “Dry” stator which provides excellent field serviceability, flexibility and high reliability. The patented bi-flow design contributes DX3 achieving completely equal high MOPD performance in both flow directions. In addition, the DX3 also employs the take-apart body and IP65/IP67 protected stators.



The unique features and capacity range of the DX3 make it be an appropriate solution for electric bus AC and heat pump, commercial heat pump, modular air-conditioning, process chiller, etc.

Key Features:

- Compatible with R22, R410A, R407C, R134a and R32
- Broad capacity displacement: 8/10/12.5/15/20/25 Tons @ R22 application
- 12VDC Uni-polar stepper motor driven, 500 steps
- Bi-flow, same capacity and MOPD in both normal & reverse directions
- Long lifetime, high reliability: 250k full cycles’ reliability test
- IP65 / IP67 protection
- CE certification

Nominal capacity and valve body selection:

Model	PCN	Capacity (Tons)*					Capacity (kW)*					Connection Inlet x Outlet
		R22	R410A	R407C	R134a	R32	R22	R410A	R407C	R134a	R32	
DX3-008	098301	8.0	9.4	8.5	6.3	13.9	28.1	33.0	29.9	22.0	48.7	5/8 x 5/8 ODF
DX3-010	098302	10.1	11.8	10.7	7.9	17.4	35.2	41.3	37.4	27.5	60.9	5/8 x 5/8 ODF
DX3-012	098303	12.6	14.7	13.4	9.8	21.7	44.0	51.6	46.8	34.3	76.1	5/8 x 5/8 ODF
DX3-015	098304	15.1	17.7	16.0	11.8	26.1	52.8	62.0	56.1	41.2	91.4	5/8 x 5/8 ODF
DX3-020	098305	20.1	23.6	21.4	15.7	34.8	70.3	82.6	74.8	54.9	121.8	5/8 x 5/8 ODF
DX3-025	098306	25.1	29.5	26.7	19.6	43.5	87.9	103.3	93.5	68.7	152.3	5/8 x 5/8 ODF

*Nominal capacity is based on following condition per AHRI standard:

No.	Refrigerant	Condensing temperature (°C)	Evaporating temperature (°C)	Sub-cooling (K)
1	R22, R410A, R134a, R32	38	4	1
2	R407C	+38°C bubble point (+43°C dew point)	4	1



D A T A S H E E T

Stator kit selection:

Model	PCN	Description	3D Sketch
DX3-SU205	098307	DX3 stator IP65 kit <ul style="list-style-type: none"> • 12VDC coil with 2m cable • 1 O-ring • screw cap 	
DX3-SU207	098308	DX3 stator IP67 kit <ul style="list-style-type: none"> • 12VDC coil with 2m cable • 2 O-rings • screw cap 	
DX3-SU305J	098315	DX3 stator IP65 kit <ul style="list-style-type: none"> • 12VDC coil with 3m cable and JST XHP-5 • 1 O-ring • screw cap 	
DX3-SU307J	098316	DX3 stator IP67 kit <ul style="list-style-type: none"> • 12VDC coil with 3m cable and JST XHP-5 • 2 O-rings • screw cap 	
DX3-SU605J	098323	DX3 stator IP65 kit <ul style="list-style-type: none"> • 12VDC coil with 6m cable and JST XHP-5 • 1 O-ring • screw cap 	
DX3-SU607J	098324	DX3 stator IP67 kit <ul style="list-style-type: none"> • 12VDC coil with 6m cable and JST XHP-5 • 2 O-rings • screw cap 	



D A T A S H E E T

Valve technical data:

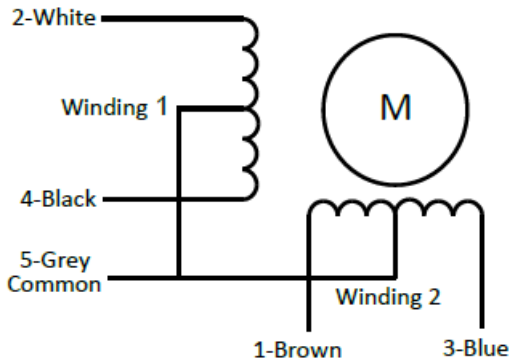
Flow direction	Bi-flow
Flow characteristic	Linear (50~500 Steps)
MWP	680 psig (46.9 bar)
MOPD	Normal direction: 500 psig (34.5 bar) Reverse direction: 500 psig (34.5 bar)
Burst	3400 psig (234.5 bar)
Seat leakage	150 ml/min
External leakage	2.83 g/year
Vibration	≤ 4.5 g
Refrigerant temperature	-35~70 °C
Ambient temperature	-35~60 °C
Protection index	IP65/IP67
Compatible lubricants	Mineral oil & POE
Weight	250 g

Stepper motor technical data:

Type	5 wires uni-polar stepper motor
Operation frequency/Step rate(Hz)	30~90 Hz, 50 Hz recommended (1 Hz = 1 pulse per second)
Total pulses	500 pulses (Note: do not apply for more than 550 pulses)
Start to open at	6~52 pulses
Supply voltage	12 VDC (+/- 10%)
Nominal opening current @ 12 VDC	300 mA/phase
Resistance	40 Ω/phase (+/- 10%)
Insulation class	F
Cable length	2m/3m/6m, integrated with stator

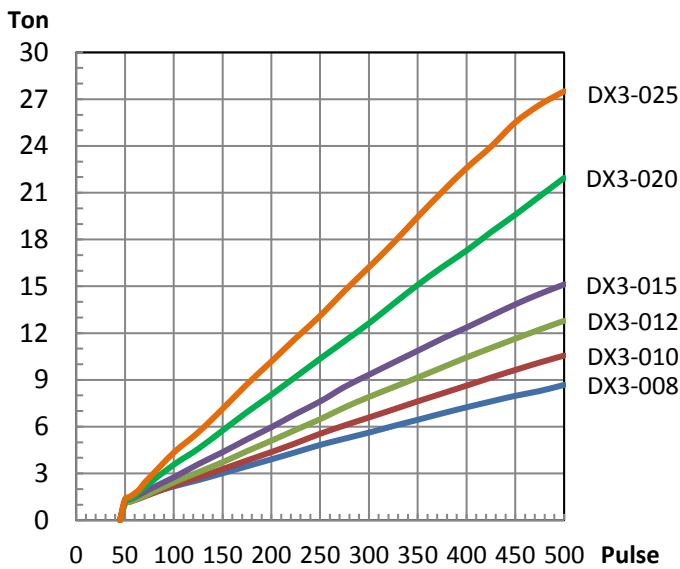
D A T A S H E E T

Stepper motor wiring and valve movement:



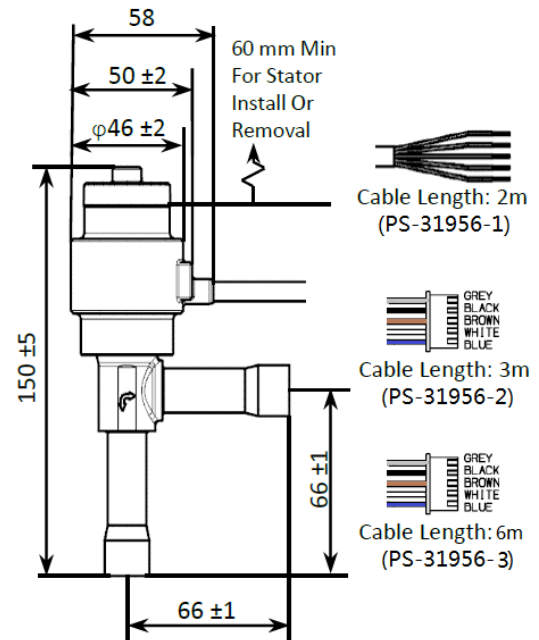
Wires	Valve Movement (Pulses Switching Mode)							
	Open:				Close:			
2: White	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
4: Black	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
1: Brown	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
3: Blue	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
5: Gray	ON	ON	ON	ON	ON	ON	ON	ON

Flow Characteristic (Reference for both normal and reverse directions):



Conditions: R22, condensing temperature 38°C, evaporating temperature 4°C, sub-cooling 1K.

Overall dimension (mm):



General information:

Technical data are correct at the time of printing. Updates may occur, and should you need confirmation of a specific value, please contact Emerson clearly stating the information required.

Emerson cannot be held responsible for errors in capacities, dimensions, etc., stated herein. Products, specifications and data in this literature are subject to change without notice.

The information given herein is based on data and tests which Emerson believes to be reliable and which are in accordance with today's technical knowledge. It is intended for use by persons having the appropriate technical knowledge and skill, at their own discretion and risk.



D A T A S H E E T

Extended capacities as expansion valves:

The following tables provide the capacity of valves at different conditions considering 1.5 bar pressure drop through liquid line:

Condensing Temperature (°C)	R22			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
65	28.8	29.3	29.6	29.8	29.9	29.9	29.7	29.5	29.2	28.8	28.4	DX3-008
	36.0	36.6	37.0	37.3	37.4	37.3	37.1	36.9	36.5	36.1	35.5	DX3-010
	45.0	45.8	46.3	46.6	46.7	46.6	46.4	46.1	45.6	45.1	44.4	DX3-012
	54.0	54.9	55.6	55.9	56.0	56.0	55.7	55.3	54.8	54.1	53.3	DX3-015
	72.0	73.2	74.1	74.6	74.7	74.6	74.3	73.7	73.0	72.1	71.1	DX3-020
	90.0	91.6	92.6	93.2	93.4	93.3	92.9	92.2	91.3	90.1	88.8	DX3-025
60	28.5	29.1	29.6	29.9	30.1	30.2	30.1	30.0	29.8	29.5	29.1	DX3-008
	35.6	36.4	37.0	37.4	37.7	37.7	37.7	37.5	37.2	36.8	36.4	DX3-010
	44.5	45.5	46.3	46.8	47.1	47.2	47.1	46.9	46.5	46.0	45.5	DX3-012
	53.4	54.6	55.5	56.1	56.5	56.6	56.5	56.2	55.8	55.3	54.6	DX3-015
	71.2	72.9	74.1	74.9	75.3	75.5	75.3	75.0	74.4	73.7	72.8	DX3-020
	89.0	91.1	92.6	93.6	94.1	94.3	94.2	93.7	93.0	92.1	91.0	DX3-025
55	27.7	28.6	29.2	29.7	30.0	30.2	30.2	30.2	30.0	29.8	29.5	DX3-008
	34.7	35.7	36.5	37.1	37.5	37.7	37.8	37.7	37.5	37.2	36.9	DX3-010
	43.3	44.7	45.7	46.4	46.9	47.2	47.2	47.1	46.9	46.5	46.1	DX3-012
	52.0	53.6	54.8	55.7	56.3	56.6	56.7	56.6	56.3	55.8	55.3	DX3-015
	69.3	71.5	73.1	74.3	75.0	75.4	75.6	75.4	75.0	74.5	73.7	DX3-020
	86.7	89.4	91.4	92.8	93.8	94.3	94.4	94.3	93.8	93.1	92.1	DX3-025
50	26.6	27.7	28.5	29.1	29.6	29.9	30.0	30.0	30.0	29.8	29.6	DX3-008
	33.2	34.6	35.6	36.4	37.0	37.3	37.5	37.6	37.5	37.3	37.0	DX3-010
	41.5	43.2	44.5	45.5	46.2	46.7	46.9	46.9	46.8	46.6	46.2	DX3-012
	49.8	51.9	53.4	54.6	55.4	56.0	56.3	56.3	56.2	55.9	55.5	DX3-015
	66.4	69.1	71.2	72.8	73.9	74.7	75.0	75.1	74.9	74.6	74.0	DX3-020
	83.0	86.4	89.1	91.0	92.4	93.3	93.8	93.9	93.7	93.2	92.5	DX3-025
45	24.9	26.3	27.4	28.2	28.8	29.2	29.5	29.7	29.7	29.6	29.4	DX3-008
	31.2	32.9	34.2	35.3	36.0	36.6	36.9	37.1	37.1	37.0	36.8	DX3-010
	39.0	41.1	42.8	44.1	45.0	45.7	46.1	46.3	46.4	46.2	46.0	DX3-012
	46.8	49.4	51.4	52.9	54.0	54.8	55.3	55.6	55.6	55.5	55.2	DX3-015
	62.4	65.8	68.5	70.5	72.0	73.1	73.8	74.1	74.2	74.0	73.6	DX3-020
	77.9	82.3	85.6	88.2	90.1	91.4	92.2	92.7	92.7	92.5	92.0	DX3-025
40	22.8	24.6	25.9	27.0	27.8	28.3	28.7	29.0	29.1	29.1	29.0	DX3-008
	28.5	30.7	32.4	33.7	34.7	35.4	35.9	36.2	36.4	36.4	36.3	DX3-010
	35.6	38.4	40.5	42.1	43.4	44.3	44.9	45.3	45.5	45.5	45.4	DX3-012
	42.8	46.0	48.6	50.5	52.0	53.1	53.9	54.4	54.6	54.6	54.4	DX3-015
	57.0	61.4	64.8	67.4	69.4	70.8	71.8	72.5	72.8	72.8	72.6	DX3-020
	71.3	76.7	81.0	84.2	86.7	88.5	89.8	90.6	91.0	91.0	90.7	DX3-025



DX3 Stepper Motor Driven Electronic Expansion Valve

Flow Controls

D A T A S H E E T

Condensing Temperature (°C)	R22			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
35	20.0	22.3	24.0	25.3	26.4	27.1	27.7	28.1	28.3	28.4	28.4	DX3-008
	25.1	27.9	30.0	31.7	33.0	33.9	34.6	35.1	35.4	35.5	35.5	DX3-010
	31.3	34.8	37.5	39.6	41.2	42.4	43.3	43.9	44.2	44.4	44.4	DX3-012
	37.6	41.8	45.0	47.5	49.4	50.9	51.9	52.6	53.1	53.3	53.3	DX3-015
	50.1	55.7	60.0	63.4	65.9	67.8	69.2	70.2	70.8	71.0	71.0	DX3-020
	62.6	69.7	75.0	79.2	82.4	84.8	86.5	87.7	88.4	88.8	88.8	DX3-025
30	16.4	19.4	21.6	23.3	24.6	25.6	26.4	26.9	27.2	27.5	27.5	DX3-008
	20.5	24.2	27.0	29.2	30.8	32.0	32.9	33.6	34.1	34.3	34.4	DX3-010
	25.6	30.3	33.8	36.4	38.5	40.0	41.2	42.0	42.6	42.9	43.0	DX3-012
	30.7	36.4	40.5	43.7	46.2	48.0	49.4	50.4	51.1	51.5	51.6	DX3-015
	40.9	48.5	54.1	58.3	61.6	64.0	65.9	67.2	68.1	68.6	68.9	DX3-020
	51.2	60.6	67.6	72.9	76.9	80.0	82.3	84.0	85.1	85.8	86.1	DX3-025
25	11.0	15.6	18.6	20.8	22.5	23.8	24.7	25.4	25.9	26.3	26.5	DX3-008
	13.8	19.5	23.3	26.0	28.1	29.7	30.9	31.8	32.4	32.8	33.1	DX3-010
	17.2	24.3	29.1	32.5	35.1	37.1	38.6	39.7	40.5	41.1	41.4	DX3-012
	20.7	29.2	34.9	39.0	42.2	44.6	46.4	47.7	48.6	49.3	49.6	DX3-015
	27.5	38.9	46.5	52.1	56.2	59.4	61.8	63.6	64.8	65.7	66.2	DX3-020
	34.4	48.7	58.2	65.1	70.3	74.3	77.3	79.5	81.1	82.1	82.7	DX3-025
20		12.4	18.3	22.1	24.9	26.9	28.5	29.6	30.5	31.1	31.5	DX3-010
		15.5	22.9	27.6	31.1	33.6	35.6	37.0	38.1	38.8	39.3	DX3-012
		18.6	27.4	33.2	37.3	40.4	42.7	44.4	45.7	46.6	47.2	DX3-015
		24.8	36.6	44.2	49.7	53.8	56.9	59.2	60.9	62.1	62.9	DX3-020
		31.0	45.7	55.3	62.1	67.3	71.1	74.0	76.2	77.7	78.6	DX3-025
15			8.2	13.0	15.9	18.0	19.6	20.7	21.6	22.2	22.6	DX3-008
			10.2	16.2	19.9	22.5	24.5	25.9	27.0	27.8	28.3	DX3-010
			12.8	20.3	24.9	28.2	30.6	32.4	33.7	34.7	35.4	DX3-012
			15.3	24.3	29.9	33.8	36.7	38.9	40.5	41.7	42.5	DX3-015
			20.5	32.4	39.8	45.1	48.9	51.8	54.0	55.5	56.6	DX3-020
			25.6	40.5	49.8	56.3	61.2	64.8	67.5	69.4	70.8	DX3-025
10				6.8	12.2	15.4	17.6	19.2	20.4	21.2	21.9	DX3-008
				8.5	15.3	19.2	22.0	24.0	25.4	26.5	27.3	DX3-010
				10.6	19.1	24.1	27.5	30.0	31.8	33.2	34.1	DX3-012
				12.7	23.0	28.9	33.0	36.0	38.2	39.8	41.0	DX3-015
				17.0	30.6	38.5	44.0	47.9	50.9	53.1	54.6	DX3-020
				21.2	38.3	48.1	54.9	59.9	63.6	66.3	68.3	DX3-025



D A T A S H E E T

Condensing Temperature (°C)	R410A											Valve Type
	Extended Capacity (kW)											
	Evaporating Temperature (°C)											
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
65	26.1	26.6	26.9	27.1	27.1	27.0	26.9	26.6	26.2	25.7	25.2	DX3-008
	32.6	33.2	33.6	33.9	33.9	33.8	33.6	33.2	32.7	32.2	31.5	DX3-010
	40.8	41.5	42.1	42.3	42.4	42.3	42.0	41.5	40.9	40.2	39.4	DX3-012
	48.9	49.9	50.5	50.8	50.9	50.7	50.3	49.8	49.1	48.3	47.3	DX3-015
	65.2	66.5	67.3	67.7	67.8	67.6	67.1	66.4	65.5	64.4	63.1	DX3-020
	81.6	83.1	84.1	84.6	84.8	84.5	83.9	83.0	81.9	80.5	78.8	DX3-025
60	28.5	29.2	29.8	30.1	30.3	30.3	30.2	30.0	29.8	29.4	28.9	DX3-008
	35.6	36.5	37.2	37.6	37.8	37.9	37.8	37.6	37.2	36.7	36.2	DX3-010
	44.6	45.7	46.5	47.0	47.3	47.4	47.2	46.9	46.5	45.9	45.2	DX3-012
	53.5	54.8	55.8	56.4	56.8	56.8	56.7	56.3	55.8	55.1	54.2	DX3-015
	71.3	73.1	74.4	75.2	75.7	75.8	75.6	75.1	74.4	73.4	72.3	DX3-020
	89.1	91.4	93.0	94.0	94.6	94.7	94.5	93.9	93.0	91.8	90.4	DX3-025
55	29.6	30.5	31.3	31.8	32.1	32.3	32.3	32.2	32.0	31.7	31.4	DX3-008
	37.0	38.2	39.1	39.7	40.1	40.4	40.4	40.3	40.1	39.7	39.2	DX3-010
	46.2	47.7	48.8	49.7	50.2	50.5	50.5	50.4	50.1	49.6	49.0	DX3-012
	55.4	57.2	58.6	59.6	60.2	60.6	60.6	60.5	60.1	59.5	58.8	DX3-015
	73.9	76.3	78.1	79.5	80.3	80.7	80.8	80.6	80.1	79.4	78.4	DX3-020
	92.4	95.4	97.7	99.3	100.4	100.9	101.0	100.8	100.1	99.2	98.0	DX3-025
50	29.7	30.9	31.9	32.6	33.1	33.5	33.6	33.6	33.5	33.3	33.0	DX3-008
	37.1	38.6	39.9	40.8	41.4	41.8	42.0	42.1	41.9	41.7	41.3	DX3-010
	46.4	48.3	49.8	51.0	51.8	52.3	52.5	52.6	52.4	52.1	51.6	DX3-012
	55.6	58.0	59.8	61.1	62.1	62.7	63.0	63.1	62.9	62.5	61.9	DX3-015
	74.2	77.3	79.7	81.5	82.8	83.6	84.0	84.1	83.9	83.3	82.6	DX3-020
	92.7	96.6	99.6	101.9	103.5	104.5	105.1	105.1	104.8	104.2	103.2	DX3-025
45	29.0	30.6	31.8	32.8	33.5	34.0	34.3	34.4	34.4	34.3	34.1	DX3-008
	36.2	38.2	39.7	40.9	41.8	42.4	42.8	43.0	43.0	42.9	42.6	DX3-010
	45.3	47.7	49.7	51.2	52.3	53.1	53.6	53.8	53.8	53.6	53.3	DX3-012
	54.3	57.3	59.6	61.4	62.7	63.7	64.3	64.5	64.6	64.4	63.9	DX3-015
	72.4	76.4	79.5	81.9	83.6	84.9	85.7	86.1	86.1	85.8	85.3	DX3-020
	90.5	95.5	99.4	102.3	104.6	106.1	107.1	107.6	107.6	107.3	106.6	DX3-025
40	27.5	29.5	31.1	32.3	33.2	33.9	34.4	34.7	34.8	34.8	34.7	DX3-008
	34.3	36.8	38.8	40.4	41.5	42.4	43.0	43.4	43.5	43.5	43.4	DX3-010
	42.9	46.1	48.5	50.4	51.9	53.0	53.7	54.2	54.4	54.4	54.2	DX3-012
	51.5	55.3	58.2	60.5	62.3	63.6	64.5	65.0	65.3	65.3	65.0	DX3-015
	68.7	73.7	77.6	80.7	83.0	84.8	86.0	86.7	87.0	87.0	86.7	DX3-020
	85.9	92.1	97.0	100.9	103.8	106.0	107.5	108.4	108.8	108.8	108.4	DX3-025



D A T A S H E E T

Condensing Temperature (°C)	R410A											Valve Type
	Extended Capacity (kW)											
	Evaporating Temperature (°C)											
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
35	25.1	27.7	29.7	31.2	32.4	33.3	34.0	34.5	34.7	34.9	34.8	DX3-008
	31.4	34.6	37.1	39.0	40.5	41.7	42.5	43.1	43.4	43.6	43.5	DX3-010
	39.2	43.2	46.4	48.8	50.7	52.1	53.1	53.9	54.3	54.5	54.4	DX3-012
	47.1	51.9	55.6	58.6	60.8	62.5	63.8	64.6	65.1	65.4	65.3	DX3-015
	62.8	69.2	74.2	78.1	81.1	83.4	85.0	86.2	86.9	87.1	87.1	DX3-020
	78.5	86.5	92.7	97.6	101.4	104.2	106.3	107.7	108.6	108.9	108.9	DX3-025
30	21.7	25.0	27.6	29.6	31.1	32.3	33.2	33.8	34.2	34.5	34.6	DX3-008
	27.1	31.3	34.5	37.0	38.9	40.4	41.5	42.3	42.8	43.1	43.2	DX3-010
	33.9	39.1	43.1	46.2	48.6	50.5	51.8	52.8	53.5	53.9	54.0	DX3-012
	40.7	47.0	51.8	55.5	58.3	60.6	62.2	63.4	64.2	64.7	64.9	DX3-015
	54.2	62.6	69.0	73.9	77.8	80.7	83.0	84.5	85.6	86.2	86.5	DX3-020
	67.8	78.3	86.3	92.4	97.2	100.9	103.7	105.7	107.0	107.8	108.1	DX3-025
25	16.6	21.4	24.7	27.3	29.2	30.7	31.9	32.7	33.3	33.7	34.0	DX3-008
	20.8	26.7	30.9	34.1	36.5	38.4	39.9	40.9	41.7	42.2	42.5	DX3-010
	26.0	33.4	38.7	42.6	45.7	48.0	49.8	51.2	52.1	52.7	53.1	DX3-012
	31.2	40.1	46.4	51.2	54.8	57.6	59.8	61.4	62.5	63.3	63.7	DX3-015
	41.6	53.4	61.9	68.2	73.1	76.9	79.7	81.9	83.4	84.4	84.9	DX3-020
	52.0	66.8	77.3	85.3	91.4	96.1	99.7	102.3	104.2	105.5	106.2	DX3-025
20	7.3	16.0	20.8	24.2	26.7	28.7	30.1	31.2	32.1	32.6	33.0	DX3-008
	9.1	20.0	26.1	30.3	33.4	35.8	37.7	39.1	40.1	40.8	41.3	DX3-010
	11.4	25.0	32.6	37.8	41.8	44.8	47.1	48.8	50.1	51.0	51.6	DX3-012
	13.6	30.1	39.1	45.4	50.1	53.7	56.5	58.6	60.1	61.2	61.9	DX3-015
	18.2	40.1	52.1	60.6	66.9	71.7	75.3	78.1	80.2	81.6	82.5	DX3-020
	22.7	50.1	65.1	75.7	83.6	89.6	94.2	97.6	100.2	102.0	103.1	DX3-025
15		5.6	15.2	20.1	23.5	26.0	27.9	29.3	30.4	31.1	31.7	DX3-008
		7.0	19.0	25.1	29.4	32.5	34.8	36.6	38.0	38.9	39.6	DX3-010
		8.8	23.8	31.4	36.7	40.6	43.6	45.8	47.5	48.7	49.5	DX3-012
		10.5	28.6	37.7	44.1	48.7	52.3	54.9	56.9	58.4	59.4	DX3-015
		14.1	38.1	50.3	58.7	65.0	69.7	73.3	75.9	77.9	79.2	DX3-020
		17.6	47.6	62.9	73.4	81.2	87.1	91.6	94.9	97.3	99.0	DX3-025
10			2.8	14.2	19.2	22.6	25.0	26.9	28.3	29.3	30.0	DX3-008
			3.5	17.8	24.0	28.2	31.3	33.6	35.3	36.6	37.5	DX3-010
			4.3	22.2	30.0	35.3	39.1	42.0	44.2	45.8	46.9	DX3-012
			5.2	26.6	36.0	42.3	46.9	50.4	53.0	54.9	56.3	DX3-015
			6.9	35.5	48.0	56.4	62.6	67.2	70.7	73.2	75.1	DX3-020
			8.6	44.4	60.0	70.5	78.2	84.0	88.3	91.5	93.8	DX3-025



D A T A S H E E T

Condensing Temperature (°C)	R407C			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
Dew Point 68.6 Bubble Point 65	27.3	27.5	27.5	27.3	27.1	26.8	26.3	25.8	25.3	24.6	24.0	DX3-008
	34.1	34.3	34.3	34.2	33.9	33.4	32.9	32.3	31.6	30.8	30.0	DX3-010
	42.7	42.9	42.9	42.7	42.3	41.8	41.1	40.4	39.5	38.5	37.4	DX3-012
	51.2	51.5	51.5	51.3	50.8	50.2	49.4	48.4	47.4	46.2	44.9	DX3-015
	68.3	68.6	68.7	68.3	67.7	66.9	65.8	64.6	63.2	61.6	59.9	DX3-020
	85.3	85.8	85.8	85.4	84.7	83.6	82.3	80.7	78.9	77.0	74.9	DX3-025
Dew Point 63.9 Bubble Point 60	28.0	28.3	28.5	28.4	28.3	28.1	27.7	27.3	26.8	26.2	25.6	DX3-008
	35.0	35.4	35.6	35.6	35.4	35.1	34.7	34.1	33.5	32.8	32.0	DX3-010
	43.7	44.2	44.5	44.5	44.2	43.9	43.3	42.7	41.9	41.0	40.0	DX3-012
	52.5	53.1	53.3	53.3	53.1	52.6	52.0	51.2	50.3	49.2	48.0	DX3-015
	70.0	70.8	71.1	71.1	70.8	70.2	69.3	68.3	67.0	65.6	64.1	DX3-020
	87.5	88.5	88.9	88.9	88.5	87.7	86.7	85.3	83.8	82.0	80.1	DX3-025
Dew Point 59.2 Bubble Point 55	28.2	28.7	29.0	29.1	29.1	28.9	28.7	28.4	27.9	27.4	26.9	DX3-008
	35.2	35.8	36.2	36.4	36.4	36.2	35.9	35.4	34.9	34.3	33.6	DX3-010
	44.0	44.8	45.3	45.5	45.4	45.2	44.8	44.3	43.6	42.9	42.0	DX3-012
	52.8	53.7	54.3	54.6	54.5	54.3	53.8	53.2	52.4	51.4	50.4	DX3-015
	70.4	71.7	72.4	72.7	72.7	72.4	71.7	70.9	69.8	68.6	67.2	DX3-020
	88.0	89.6	90.5	90.9	90.9	90.5	89.7	88.6	87.3	85.7	84.0	DX3-025
Dew Point 54.5 Bubble Point 50	27.8	28.5	29.0	29.3	29.4	29.4	29.3	29.0	28.7	28.2	27.8	DX3-008
	34.8	35.7	36.3	36.6	36.8	36.8	36.6	36.3	35.8	35.3	34.7	DX3-010
	43.5	44.6	45.4	45.8	46.0	46.0	45.7	45.3	44.8	44.1	43.4	DX3-012
	52.2	53.5	54.4	55.0	55.2	55.1	54.9	54.4	53.8	53.0	52.0	DX3-015
	69.6	71.4	72.6	73.3	73.6	73.5	73.2	72.5	71.7	70.6	69.4	DX3-020
	87.0	89.2	90.7	91.6	92.0	91.9	91.5	90.7	89.6	88.3	86.7	DX3-025
Dew Point 49.7 Bubble Point 45	27.0	28.0	28.7	29.1	29.4	29.5	29.5	29.3	29.1	28.7	28.3	DX3-008
	33.8	35.0	35.8	36.4	36.7	36.9	36.8	36.6	36.3	35.9	35.4	DX3-010
	42.2	43.7	44.8	45.5	45.9	46.1	46.0	45.8	45.4	44.9	44.2	DX3-012
	50.7	52.5	53.7	54.6	55.1	55.3	55.3	55.0	54.5	53.9	53.1	DX3-015
	67.5	69.9	71.7	72.8	73.5	73.8	73.7	73.3	72.7	71.8	70.7	DX3-020
	84.4	87.4	89.6	91.0	91.9	92.2	92.1	91.6	90.8	89.8	88.4	DX3-025
Dew Point 44.9 Bubble Point 40	25.7	26.9	27.9	28.5	29.0	29.2	29.3	29.3	29.1	28.9	28.5	DX3-008
	32.1	33.7	34.8	35.7	36.2	36.5	36.7	36.6	36.4	36.1	35.7	DX3-010
	40.1	42.1	43.6	44.6	45.3	45.7	45.8	45.8	45.5	45.1	44.6	DX3-012
	48.2	50.5	52.3	53.5	54.3	54.8	55.0	54.9	54.6	54.1	53.5	DX3-015
	64.2	67.4	69.7	71.4	72.5	73.1	73.3	73.2	72.8	72.2	71.3	DX3-020
	80.3	84.2	87.1	89.2	90.6	91.4	91.7	91.5	91.0	90.2	89.2	DX3-025



D A T A S H E E T

Condensing Temperature (°C)	R407C			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
Dew Point 40.1 Bubble Point 35	23.8	25.4	26.7	27.6	28.2	28.6	28.9	28.9	28.9	28.7	28.5	DX3-008
	29.7	31.8	33.3	34.5	35.3	35.8	36.1	36.2	36.1	35.9	35.6	DX3-010
	37.2	39.7	41.7	43.1	44.1	44.7	45.1	45.2	45.1	44.9	44.5	DX3-012
	44.6	47.7	50.0	51.7	52.9	53.7	54.1	54.3	54.2	53.9	53.4	DX3-015
	59.5	63.6	66.6	68.9	70.5	71.6	72.2	72.4	72.2	71.8	71.2	DX3-020
	74.3	79.5	83.3	86.1	88.1	89.5	90.2	90.4	90.3	89.8	88.9	DX3-025
Dew Point 35.3 Bubble Point 30	21.2	23.4	25.0	26.2	27.1	27.7	28.1	28.3	28.4	28.3	28.1	DX3-008
	26.5	29.2	31.2	32.7	33.8	34.6	35.1	35.4	35.4	35.4	35.1	DX3-010
	33.2	36.5	39.0	40.9	42.3	43.2	43.9	44.2	44.3	44.2	43.9	DX3-012
	39.8	43.8	46.8	49.1	50.7	51.9	52.6	53.0	53.2	53.0	52.7	DX3-015
	53.0	58.4	62.5	65.5	67.6	69.2	70.2	70.7	70.9	70.7	70.3	DX3-020
	66.3	73.0	78.1	81.8	84.6	86.5	87.7	88.4	88.6	88.4	87.9	DX3-025
Dew Point 30.4 Bubble Point 25	17.7	20.7	22.8	24.4	25.5	26.4	27.0	27.3	27.5	27.6	27.5	DX3-008
	22.2	25.8	28.5	30.4	31.9	33.0	33.7	34.2	34.4	34.5	34.4	DX3-010
	27.7	32.3	35.6	38.1	39.9	41.2	42.1	42.7	43.0	43.1	43.0	DX3-012
	33.3	38.7	42.7	45.7	47.9	49.4	50.5	51.2	51.6	51.7	51.6	DX3-015
	44.3	51.6	57.0	60.9	63.8	65.9	67.4	68.3	68.8	68.9	68.8	DX3-020
	55.4	64.6	71.2	76.1	79.8	82.4	84.2	85.4	86.0	86.2	85.9	DX3-025
Dew Point 25.6 Bubble Point 20	12.7	17.0	19.9	22.0	23.6	24.7	25.5	26.1	26.4	26.6	26.6	DX3-008
	15.9	21.3	24.9	27.5	29.5	30.9	31.9	32.6	33.0	33.2	33.3	DX3-010
	19.9	26.6	31.1	34.4	36.8	38.6	39.9	40.7	41.3	41.6	41.6	DX3-012
	23.8	31.9	37.4	41.3	44.2	46.3	47.8	48.9	49.5	49.9	49.9	DX3-015
	31.8	42.6	49.8	55.1	58.9	61.7	63.8	65.2	66.0	66.5	66.6	DX3-020
	39.7	53.2	62.3	68.8	73.6	77.2	79.7	81.4	82.5	83.1	83.2	DX3-025
Dew Point 20.7 Bubble Point 15		11.8	16.2	19.0	21.1	22.6	23.7	24.5	25.0	25.3	25.5	DX3-008
		14.7	20.2	23.8	26.4	28.3	29.6	30.6	31.3	31.7	31.9	DX3-010
		18.4	25.2	29.8	33.0	35.3	37.0	38.2	39.1	39.6	39.8	DX3-012
		22.1	30.3	35.7	39.6	42.4	44.4	45.9	46.9	47.5	47.8	DX3-015
		29.4	40.4	47.6	52.8	56.5	59.2	61.2	62.5	63.3	63.7	DX3-020
	36.8	50.5	59.5	65.9	70.6	74.1	76.5	78.1	79.2	79.7	DX3-025	
Dew Point 15.9 Bubble Point 10			10.6	15.1	18.0	20.0	21.5	22.5	23.3	23.8	24.1	DX3-008
			13.2	18.9	22.5	25.0	26.9	28.2	29.1	29.7	30.1	DX3-010
			16.5	23.6	28.1	31.3	33.6	35.2	36.4	37.2	37.6	DX3-012
			19.9	28.3	33.7	37.5	40.3	42.3	43.7	44.6	45.2	DX3-015
			26.5	37.8	45.0	50.0	53.7	56.4	58.2	59.5	60.2	DX3-020
		33.1	47.2	56.2	62.5	67.1	70.4	72.8	74.3	75.3	DX3-025	



D A T A S H E E T

Condensing Temperature (°C)	R134a			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
65	21.9	22.0	21.9	21.7	21.5	21.1	20.7	20.2	19.7	19.1	18.5	DX3-008
	27.4	27.5	27.4	27.2	26.8	26.4	25.9	25.3	24.6	23.9	23.1	DX3-010
	34.2	34.3	34.2	34.0	33.6	33.0	32.4	31.6	30.8	29.9	28.9	DX3-012
	41.0	41.2	41.1	40.8	40.3	39.6	38.8	37.9	36.9	35.8	34.7	DX3-015
	54.7	54.9	54.8	54.3	53.7	52.8	51.8	50.6	49.2	47.8	46.3	DX3-020
	68.4	68.6	68.5	67.9	67.1	66.0	64.7	63.2	61.5	59.7	57.8	DX3-025
60	21.7	22.0	22.1	22.0	21.9	21.6	21.3	20.9	20.4	19.9	19.3	DX3-008
	27.2	27.5	27.6	27.5	27.3	27.0	26.6	26.1	25.5	24.9	24.2	DX3-010
	34.0	34.4	34.5	34.4	34.2	33.8	33.2	32.6	31.9	31.1	30.2	DX3-012
	40.8	41.2	41.4	41.3	41.0	40.5	39.9	39.1	38.2	37.3	36.2	DX3-015
	54.4	55.0	55.2	55.0	54.6	54.0	53.2	52.1	51.0	49.7	48.3	DX3-020
	68.0	68.7	69.0	68.8	68.3	67.5	66.5	65.2	63.7	62.1	60.4	DX3-025
55	21.2	21.7	21.9	22.0	21.9	21.8	21.5	21.2	20.8	20.4	19.9	DX3-008
	26.5	27.1	27.4	27.5	27.4	27.2	26.9	26.5	26.0	25.5	24.9	DX3-010
	33.2	33.8	34.2	34.3	34.3	34.0	33.7	33.1	32.5	31.8	31.1	DX3-012
	39.8	40.6	41.1	41.2	41.1	40.8	40.4	39.8	39.0	38.2	37.3	DX3-015
	53.1	54.1	54.7	55.0	54.8	54.5	53.8	53.0	52.1	50.9	49.7	DX3-020
	66.4	67.7	68.4	68.7	68.6	68.1	67.3	66.3	65.1	63.7	62.1	DX3-025
50	20.3	21.0	21.4	21.6	21.7	21.7	21.5	21.3	21.0	20.6	20.2	DX3-008
	25.4	26.2	26.8	27.1	27.2	27.1	26.9	26.6	26.2	25.8	25.2	DX3-010
	31.8	32.8	33.4	33.8	34.0	33.9	33.7	33.3	32.8	32.2	31.5	DX3-012
	38.1	39.3	40.1	40.6	40.7	40.7	40.4	39.9	39.4	38.6	37.8	DX3-015
	50.9	52.5	53.5	54.1	54.3	54.2	53.9	53.3	52.5	51.5	50.5	DX3-020
	63.6	65.6	66.9	67.6	67.9	67.8	67.3	66.6	65.6	64.4	63.1	DX3-025
45	19.0	19.9	20.6	21.0	21.2	21.3	21.3	21.1	20.9	20.6	20.2	DX3-008
	23.8	24.9	25.7	26.2	26.5	26.6	26.6	26.4	26.1	25.8	25.3	DX3-010
	29.7	31.1	32.1	32.8	33.2	33.3	33.2	33.0	32.7	32.2	31.6	DX3-012
	35.7	37.4	38.6	39.4	39.8	40.0	39.9	39.6	39.2	38.6	38.0	DX3-015
	47.6	49.8	51.4	52.5	53.1	53.3	53.2	52.8	52.3	51.5	50.6	DX3-020
	59.5	62.3	64.3	65.6	66.3	66.6	66.5	66.0	65.3	64.4	63.3	DX3-025
40	17.2	18.5	19.4	20.0	20.4	20.7	20.7	20.7	20.6	20.4	20.1	DX3-008
	21.5	23.1	24.2	25.0	25.5	25.8	25.9	25.9	25.7	25.5	25.1	DX3-010
	26.9	28.9	30.3	31.3	31.9	32.3	32.4	32.4	32.2	31.8	31.4	DX3-012
	32.3	34.6	36.3	37.5	38.3	38.7	38.9	38.8	38.6	38.2	37.6	DX3-015
	43.0	46.2	48.5	50.0	51.1	51.7	51.9	51.8	51.5	50.9	50.2	DX3-020
	53.8	57.7	60.6	62.5	63.8	64.6	64.8	64.7	64.3	63.6	62.7	DX3-025



DX3 Stepper Motor Driven Electronic Expansion Valve

Flow Controls

D A T A S H E E T

Condensing Temperature (°C)	R134a			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
35	14.8	16.5	17.8	18.7	19.3	19.7	20.0	20.0	20.0	19.9	19.7	DX3-008
	18.5	20.7	22.2	23.4	24.1	24.7	24.9	25.1	25.0	24.9	24.6	DX3-010
	23.1	25.8	27.8	29.2	30.2	30.8	31.2	31.3	31.3	31.1	30.8	DX3-012
	27.7	31.0	33.4	35.0	36.2	37.0	37.4	37.6	37.5	37.3	36.9	DX3-015
	36.9	41.3	44.5	46.7	48.3	49.3	49.9	50.1	50.0	49.7	49.2	DX3-020
	46.2	51.7	55.6	58.4	60.4	61.6	62.4	62.6	62.6	62.2	61.5	DX3-025
30	11.4	13.9	15.7	17.0	17.9	18.5	18.9	19.1	19.2	19.2	19.1	DX3-008
	14.2	17.4	19.6	21.2	22.3	23.1	23.6	23.9	24.0	24.0	23.8	DX3-010
	17.7	21.8	24.6	26.5	27.9	28.9	29.5	29.9	30.0	30.0	29.8	DX3-012
	21.3	26.1	29.5	31.8	33.5	34.7	35.4	35.9	36.0	36.0	35.7	DX3-015
	28.4	34.9	39.3	42.4	44.7	46.2	47.2	47.8	48.0	48.0	47.7	DX3-020
	35.5	43.6	49.1	53.0	55.8	57.8	59.0	59.8	60.0	60.0	59.6	DX3-025
25	5.4	10.3	13.0	14.8	16.0	16.9	17.5	17.9	18.2	18.2	18.2	DX3-008
	6.8	12.8	16.2	18.4	20.0	21.1	21.9	22.4	22.7	22.8	22.8	DX3-010
	8.4	16.1	20.2	23.1	25.0	26.4	27.4	28.0	28.4	28.5	28.5	DX3-012
	10.1	19.3	24.3	27.7	30.0	31.7	32.9	33.6	34.0	34.2	34.2	DX3-015
	13.5	25.7	32.4	36.9	40.0	42.3	43.8	44.8	45.4	45.6	45.6	DX3-020
	16.9	32.1	40.5	46.1	50.1	52.8	54.8	56.0	56.7	57.0	56.9	DX3-025
20		2.9	9.0	11.8	13.6	14.9	15.8	16.4	16.8	17.1	17.1	DX3-008
		3.6	11.2	14.8	17.1	18.7	19.8	20.5	21.0	21.3	21.4	DX3-010
		4.5	14.0	18.4	21.3	23.3	24.7	25.7	26.3	26.6	26.8	DX3-012
		5.4	16.8	22.1	25.6	28.0	29.7	30.8	31.5	32.0	32.1	DX3-015
		7.2	22.4	29.5	34.1	37.3	39.5	41.1	42.1	42.6	42.9	DX3-020
		9.0	28.0	36.9	42.6	46.6	49.4	51.3	52.6	53.3	53.6	DX3-025
15				7.4	10.5	12.4	13.7	14.6	15.2	15.6	15.8	DX3-008
				9.2	13.1	15.5	17.1	18.2	19.0	19.5	19.8	DX3-010
				11.5	16.3	19.3	21.4	22.8	23.7	24.4	24.7	DX3-012
				13.8	19.6	23.2	25.6	27.3	28.5	29.2	29.7	DX3-015
				18.4	26.1	30.9	34.2	36.4	38.0	39.0	39.5	DX3-020
				23.0	32.7	38.6	42.7	45.5	47.5	48.7	49.4	DX3-025
10					5.2	8.8	10.9	12.2	13.2	13.8	14.2	DX3-008
					6.5	11.0	13.6	15.3	16.5	17.2	17.8	DX3-010
					8.1	13.8	17.0	19.1	20.6	21.6	22.2	DX3-012
					9.7	16.6	20.4	23.0	24.7	25.9	26.6	DX3-015
					12.9	22.1	27.2	30.6	32.9	34.5	35.5	DX3-020
					16.2	27.6	34.0	38.3	41.1	43.1	44.4	DX3-025



D A T A S H E E T

Condensing Temperature (°C)	R32			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
65	46.2	47.5	48.5	49.3	49.9	50.3	50.5	50.6	50.5	50.4	50.1	DX3-008
	57.8	59.4	60.6	61.6	62.3	62.9	63.1	63.2	63.2	63.0	62.6	DX3-010
	72.2	74.2	75.8	77.0	77.9	78.6	78.9	79.1	79.0	78.7	78.3	DX3-012
	86.7	89.0	90.9	92.4	93.5	94.3	94.7	94.9	94.8	94.4	93.9	DX3-015
	115.5	118.7	121.3	123.2	124.7	125.7	126.3	126.5	126.4	125.9	125.2	DX3-020
	144.4	148.4	151.6	154.0	155.9	157.1	157.9	158.1	158.0	157.4	156.5	DX3-025
60	47.1	48.6	49.9	50.8	51.6	52.2	52.5	52.7	52.8	52.7	52.5	DX3-008
	58.8	60.8	62.3	63.6	64.5	65.2	65.7	65.9	66.0	65.9	65.6	DX3-010
	73.5	75.9	77.9	79.5	80.6	81.5	82.1	82.4	82.5	82.3	82.0	DX3-012
	88.3	91.1	93.5	95.3	96.8	97.8	98.5	98.9	99.0	98.8	98.4	DX3-015
	117.7	121.5	124.6	127.1	129.0	130.4	131.3	131.8	131.9	131.7	131.2	DX3-020
	147.1	151.9	155.8	158.9	161.3	163.0	164.2	164.8	164.9	164.7	164.0	DX3-025
55	46.8	48.7	50.2	51.4	52.3	53.1	53.6	53.9	54.1	54.1	54.0	DX3-008
	58.5	60.8	62.7	64.2	65.4	66.3	67.0	67.4	67.6	67.6	67.4	DX3-010
	73.2	76.0	78.4	80.3	81.8	82.9	83.7	84.2	84.5	84.5	84.3	DX3-012
	87.8	91.2	94.1	96.3	98.1	99.5	100.4	101.1	101.4	101.4	101.2	DX3-015
	117.0	121.7	125.4	128.5	130.8	132.6	133.9	134.7	135.1	135.2	134.9	DX3-020
	146.3	152.1	156.8	160.6	163.6	165.8	167.4	168.4	168.9	169.0	168.6	DX3-025
50	45.6	47.8	49.6	51.1	52.3	53.2	53.8	54.3	54.6	54.7	54.7	DX3-008
	57.0	59.8	62.0	63.9	65.3	66.5	67.3	67.9	68.2	68.4	68.4	DX3-010
	71.3	74.7	77.5	79.8	81.7	83.1	84.1	84.9	85.3	85.5	85.4	DX3-012
	85.5	89.7	93.1	95.8	98.0	99.7	101.0	101.8	102.4	102.6	102.5	DX3-015
	114.0	119.6	124.1	127.7	130.7	132.9	134.6	135.8	136.5	136.8	136.7	DX3-020
	142.6	149.4	155.1	159.7	163.3	166.2	168.3	169.7	170.6	171.0	170.9	DX3-025
45	43.5	46.2	48.3	50.1	51.5	52.6	53.5	54.1	54.5	54.7	54.8	DX3-008
	54.4	57.7	60.4	62.6	64.4	65.8	66.8	67.6	68.1	68.4	68.5	DX3-010
	68.0	72.1	75.5	78.2	80.5	82.2	83.5	84.5	85.1	85.5	85.6	DX3-012
	81.6	86.5	90.6	93.9	96.5	98.6	100.2	101.4	102.2	102.6	102.8	DX3-015
	108.8	115.4	120.8	125.2	128.7	131.5	133.6	135.2	136.2	136.8	137.0	DX3-020
	136.0	144.2	151.0	156.5	160.9	164.4	167.1	169.0	170.3	171.0	171.3	DX3-025
40	40.5	43.7	46.3	48.4	50.1	51.4	52.5	53.3	53.9	54.2	54.4	DX3-008
	50.6	54.6	57.8	60.5	62.6	64.3	65.6	66.6	67.3	67.8	68.0	DX3-010
	63.3	68.3	72.3	75.6	78.2	80.4	82.0	83.3	84.1	84.7	85.0	DX3-012
	75.9	81.9	86.8	90.7	93.9	96.4	98.4	99.9	101.0	101.7	102.0	DX3-015
	101.2	109.2	115.7	120.9	125.2	128.6	131.2	133.2	134.6	135.5	136.0	DX3-020
	126.6	136.5	144.6	151.2	156.5	160.7	164.0	166.5	168.3	169.4	170.0	DX3-025



D A T A S H E E T

Condensing Temperature (°C)	R32			Extended Capacity (kW)								Valve Type
				Evaporating Temperature (°C)								
	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	
35	36.4	40.3	43.5	46.0	48.1	49.7	51.0	52.0	52.7	53.2	53.5	DX3-008
	45.5	50.4	54.3	57.5	60.1	62.1	63.7	65.0	65.9	66.5	66.9	DX3-010
	56.9	63.0	67.9	71.9	75.1	77.6	79.6	81.2	82.4	83.1	83.6	DX3-012
	68.3	75.6	81.5	86.3	90.1	93.2	95.6	97.4	98.8	99.8	100.4	DX3-015
	91.1	100.9	108.7	115.0	120.1	124.2	127.4	129.9	131.8	133.0	133.8	DX3-020
	113.8	126.1	135.9	143.8	150.2	155.3	159.3	162.4	164.7	166.3	167.3	DX3-025
30	31.0	36.0	39.9	42.9	45.4	47.4	48.9	50.2	51.1	51.8	52.2	DX3-008
	38.8	45.0	49.8	53.7	56.8	59.2	61.2	62.7	63.9	64.7	65.3	DX3-010
	48.5	56.2	62.3	67.1	70.9	74.0	76.5	78.4	79.8	80.9	81.6	DX3-012
	58.1	67.5	74.7	80.5	85.1	88.8	91.8	94.1	95.8	97.1	97.9	DX3-015
	77.5	90.0	99.7	107.4	113.5	118.4	122.4	125.4	127.7	129.4	130.5	DX3-020
	96.9	112.5	124.6	134.2	141.9	148.1	152.9	156.8	159.7	161.8	163.2	DX3-025
25	23.5	30.3	35.3	39.1	42.1	44.5	46.4	47.9	49.0	49.9	50.5	DX3-008
	29.3	37.9	44.1	48.9	52.6	55.6	58.0	59.9	61.3	62.4	63.1	DX3-010
	36.7	47.4	55.1	61.1	65.8	69.5	72.5	74.8	76.6	78.0	78.9	DX3-012
	44.0	56.9	66.2	73.3	79.0	83.4	87.0	89.8	91.9	93.5	94.7	DX3-015
	58.7	75.8	88.2	97.8	105.3	111.2	116.0	119.7	122.6	124.7	126.3	DX3-020
	73.4	94.8	110.3	122.2	131.6	139.1	145.0	149.6	153.2	155.9	157.8	DX3-025
20	10.1	22.5	29.4	34.3	38.1	41.0	43.3	45.1	46.5	47.6	48.4	DX3-008
	12.6	28.1	36.7	42.9	47.6	51.2	54.1	56.4	58.2	59.5	60.5	DX3-010
	15.8	35.2	45.9	53.6	59.5	64.1	67.7	70.5	72.7	74.4	75.6	DX3-012
	18.9	42.2	55.1	64.4	71.4	76.9	81.2	84.6	87.3	89.3	90.8	DX3-015
	25.2	56.3	73.5	85.8	95.2	102.5	108.3	112.8	116.3	119.0	121.0	DX3-020
	31.6	70.3	91.9	107.3	119.0	128.1	135.3	141.0	145.4	148.8	151.3	DX3-025
15			21.3	28.2	33.1	36.8	39.6	41.9	43.6	44.9	45.9	DX3-008
			26.6	35.3	41.4	46.0	49.5	52.3	54.5	56.1	57.4	DX3-010
			33.2	44.1	51.7	57.5	61.9	65.4	68.1	70.2	71.7	DX3-012
			39.9	52.9	62.1	69.0	74.3	78.5	81.7	84.2	86.1	DX3-015
			53.2	70.6	82.8	92.0	99.1	104.6	109.0	112.3	114.8	DX3-020
			66.5	88.2	103.5	114.9	123.8	130.8	136.2	140.4	143.5	DX3-025
10				19.8	26.8	31.7	35.3	38.0	40.1	41.8	43.0	DX3-008
				24.7	33.5	39.6	44.1	47.5	50.2	52.2	53.8	DX3-010
				30.9	41.9	49.5	55.1	59.4	62.7	65.3	67.3	DX3-012
				37.1	50.3	59.3	66.1	71.3	75.3	78.4	80.7	DX3-015
				49.4	67.0	79.1	88.1	95.0	100.4	104.5	107.6	DX3-020
				61.8	83.8	98.9	110.2	118.8	125.5	130.6	134.5	DX3-025